

CLEAN COPY OF THE AMENDED CLAIM

14. (Amended) A vacuum processing apparatus for applying a designated process on an object to be processed in a vacuum atmosphere, comprising:

a processing vessel for applying the designated process on the object introduced thereinto, the processing vessel being provided, therein, with a susceptor for mounting the object thereon;

a vacuum pump constructed cylindrically as a whole and arranged below the susceptor in the processing vessel so as to be coaxial with the processing vessel, for sucking exhaust gas in the processing vessel thereby to form a vacuum, the vacuum pump including:

a cylindrical inner housing arranged coaxially with the processing vessel,

a cylindrical motor stator arranged outside the cylindrical inner housing,

a number of rotors rotatably arranged with respect to the cylindrical motor stator,

a cylindrical outer housing arranged outside the rotors, and

a number of stators fixed to the cylindrical outer housing so as to each extend between the adjacent rotors; and

a driving mechanism arranged below the susceptor, for moving it up and down, wherein the vacuum pump is arranged around at least a portion of the driving mechanism coaxially therewith.